

REMARKS

Considering the matters raised in the Office Action in the same order as raised, claims 5, 12, 27, 31 and 43 were objected because of informalities. As noted above, claim 43 has been cancelled. Relative to claims 5, 12, 27, and 31, the informalities concern letters that are missing from certain words. The corrections have been made as shown in the marked-up copy of the claims. The Examiner is thanked for his assistance in this regard.

Claims 1-10 were rejected under 35 U.S.C. 102(b) as being anticipated by Peissig (US5517786). These rejections are respectfully traversed although, as explained in more detail below, independent claim 1, has been amended so as to more clearly define over the cited reference.

Turning to independent claim 1, the Peissig reference relied on in rejecting this claim discloses a heated fishing rod including a foam handle, plastic cylinder, plastic coated heat tape, rechargeable battery pack, on/off toggle button, electronic regulator, reel holder, metal housed ceramic eyes and a tapered rod shaft. The Peissig patent discloses a handle heating means for heating the surface of the heated handle section. The heated handle section comprises an inner hollow cylinder which is surrounded with a cushioning means, preferably a foam material. The Peissig patent further discloses that the entire outer perimeter of said heated handle section is wrapped with a handle heating means comprising a heating tape. Further, the Peissig patent discloses an end cap which is threadably attached to said handle section and a switching means which is mounted onto said heated handle section.

Given the actual teachings of the Peissig patent, it is respectfully submitted that claim 1, as amended, patentably distinguishes over the heated fishing rod, as described in the Peissig patent. In Peissig, the heated handle section is attached in series to an end of a shaft. As shown in Figure 4 of the Peissig patent, the end of a shaft abuts to a closed cylinder end 36. Claim 1, as amended, discloses a hand grip which is inserted over an end of a shaft. The heated handle section of Peissig can not be inserted over an end of a shaft but rather is attached in series with an end of a shaft, thereby lengthening the body

of the apparatus and requiring a means to adapt the heated handle section in series with a shaft. Applicant contends that affixing a heated handle section in series with a shaft of an apparatus such as a golf club, would lengthen the shaft of the club itself, thus, effecting both the swinging performance of a player and the balancing features of the shaft, and requiring additional storage space due to the increased length of the shaft. Thus, in applicant's proposed invention, the shaft does not have to be lengthened or altered and there is no need for an affixing means for affixing the heated hand grip to an end of a shaft.

Further, Claim 1, as amended, discloses an electrically heated hand grip comprising a heating member affixed within said hand grip. The Peissig patent discloses a handle heating means which is wrapped around the outer perimeter of the handle, See Column 3, lines 43-45. By affixing the heating member within the hand grip, the heating member is shielded and protected from wear and tear and possible damage that may occur to outer perimeter of the hand grip. Often times, the apparatus which includes the hand grip is thrown, placed outdoors and exposed to the elements, or simply dropped or placed in high damage risk locations.

As recited in applicant's amended claim 1, the end cap assembly includes a receptacle having an electrical connecting means and a power source disposed therein and an electrical switch being disposed about said end cap assembly. The Peissig patent discloses an end cap which is fittingly engaged to the handle section for providing containment of batteries, however, as shown in Figure 4, of the Peissig patent, the batteries are not completely disposed within the end cap but rather are contained in the handle section of the fishing rod. The end cap, in Peissig, is used to compress the power source within the housing of the handle section. Additionally, in Peissig, the switching means is disposed about the heated handle section and not the end cap. Applicant recites an electrical switch which is disposed about an end cap assembly.

Both the power source and electrical components of applicant's invention are concentrated in one area, the end cap assembly. This configuration provides various advantages. First, it allows for easy repair and replacement of both the

power sources and the electrical switch without having to disturb the hand receiving section of the hand grip, second, it removes any components that may be bothersome to the hands of an individual while holding the grip, third, it provides for a more compact, integrated hand grip, and fourth, in applicant's proposed invention, should the electrical switch or electrical connecting means fail or is in need of repair, the end cap assembly may be quickly replaced with another end cap assembly or a standard end cap thereby allowing an individual to immediately use the shaft, unlike in the Peissig patent, where if the electrical switch fails, the entire fishing rod is placed out of commission while the switch is being repaired.

In summary, the Peissig reference does not teach or suggest an electrically heated hand grip inserted over an end of a shaft, said heated hand grip comprising a heating member affixed within said hand grip, an end cap assembly including a receptacle having an electrical connecting means and a power source disposed therein, nor of an electrical switch being disposed about said end cap assembly. Accordingly, in light of amended claim 1, reconsideration of the rejection of claim 1 and allowance thereof is respectfully solicited.

Subject matter basis for amending claim 1 can be found in paragraphs 56-58, 71, 73 and 76 and the Figures of applicant's application.

The claims which are dependent on claim 1 further distinguish the present invention from the heating fishing rod of the Peissig patent. For example, Claim 2, as amended, recites an inner sleeve including heat reflective properties and being inserted over the end of a shaft. The Peissig patent does not disclose an inner sleeve including heat reflective properties inserted over the end of a shaft. In Peissig, the entire outer perimeter of said heated handle section is wrapped with a handle heating means comprising a heating tape. Because there is no heat reflective properties recited in Peissig, some of the heat generated by the heating tape of Peissig may be thermally concentrated towards the interior of the inner hollow cylinder rather than towards the hands of a user.

Subject matter basis for amending claim 2 can be found in paragraphs 35, 56 and 84 of applicant's application.

Claim 3, as amended, recites a heating member including a heating member being adhered to the exterior surface of an inner sleeve. The Peissig patent discloses an inner hollow cylinder being surrounded and encased along its outer perimeter with a cushioning means, preferably, a foam material. The heating member in Peissig, is wrapped around the exterior surface of the cushioning means and not around the exterior surface of the inner hollow cylinder.

Subject matter basis for the amending of claim 3 can be found in the specification as filed in paragraph 57.

Further, as recited in claims 4 and 5, of applicant's application, an outer sleeve is inserted over both the heating member and an inner sleeve, said outer sleeve being adhesively bonded to said heating member and said inner sleeve. The Peissig patent does not disclose an outer sleeve being inserted over both an inner sleeve and a heating member, where said outer sleeve is adhesively bonded to the inner sleeve and the heating member. Rather, in Peissig, the heating member is wrapped around the exterior surface of a cushioning means with no covering. The Peissig patent does not disclose an outer sleeve being inserted over the heating member as recited in applicant's application. As noted earlier, placing an outer sleeve over both the heating member and inner sleeve protects the heating member and sleeve from wear and tear and possible damage that may occur to outer perimeter of the hand grip.

Regarding claim 6, Examiner notes that it is inherent to have etched foil or a carbon fiber heater as one of the components for a heating tape. Applicant traverses Examiner's comments. Etched foil or carbon fiber heaters are very thin, delicate and costly. Using etched foil or carbon fiber heaters reduces manufacturing processes, allows for a more compact grip, saves time and space, but also increases the costs of the final product. Replacing ready available resistance heating wire with etched foil or carbon fiber heaters

requires one to consider the costs, design, structure and manufacturing processes involved. Therefore, applicant contends that it is not inherent to replace electrical heating resistance wire with etched foil or carbon fiber heaters.

Regarding claims 7 and 8, applicant recites an end section including a plurality of threads externally formed thereon, and an end cap assembly having a plurality of threads internally formed within a sidewall member. In the Peissig patent, the hollow cylinder includes a plurality of threads internally formed therein and an end cap having a plurality of threads externally formed thereon. The end cap assembly in the current application, includes a plurality of threads formed internally within a sidewall. Forming the threads internally within a sidewall allows the threads to be hidden from exposure, thus, reducing wear and tear and the chances of destroying or altering the threads making it more difficult to threadably attach the end cap assembly. Since the end cap assembly may often times be removed in order to replace or repair the power source or components, there is a strong likelihood that the end cap assembly will often times be dropped or placed in various locations, thus, increasing the risk of damaging the threads if such threads were formed externally on the end cap assembly.

In view of the amendments made to claims 1, 2, and 3, it is respectfully submitted that claims 9 and 10 which are dependent on said amended claim 1, also be allowable for the reasons set forth above.

Claims 1-13, 21-22 and 27-46 were rejected under 35 U.S.C. 102(b) as being anticipated by Cornell (US2003/0218007A1). These rejections are respectfully traversed, although, as explained in detail above and again below, independent claim 1, has been amended so as to more clearly define over the cited reference.

Turning to independent claim 1, the Cornell reference relied on in rejecting independent claim 1 discloses a heating system for warming and drying the grip of a golf club. The heating system includes an electric heating element, an end cap including a first electrical connector, a golf bag including a power

supply, a control system and a second electrical connector for engaging said first electrical connector in order to energize the heating element. In an alternative embodiment, the Cornell reference discloses a heating system for a grip of a golf club comprising a heating element, a housing for a portable power supply adapted for mounting within the golf club shaft, wherein said power supply is electrically connected to a heating element so as to energize said heating element.

The Examiner contends that the Cornell reference discloses an end cap assembly (696)[Fig. 19, page 4, [0064] including a receptacle for receiving a power source (692). As noted by applicant, amended claim 1 recites, an electrically heated hand grip comprising: a heating member affixed within said hand grip; an end cap assembly including a receptacle having an electrical connecting means and a power source disposed therein, said end cap assembly being removably attached to said hand grip; and an electrical switch being electrically coupled to said power source, said electrical connecting means and said heating member for controlling a supply of current to said heating member, said electrical switch being disposed about said end cap assembly.

As shown in Figure 19 of the Cornell reference, the power source is not disposed within the end cap assembly but rather, either within a golf bag or within a housing within the golf club shaft itself. Cornell teaches one or more batteries 692 that are received in a battery housing 690 that is positioned in the golf club shaft 614. The end cap 696 of Cornell, does not include a receptacle for having a power source disposed therein. The power source is completely encased within the golf club shaft.

Placing a power source within the shaft of a golf club, limits the golfers performance because it requires the golfer to exhibit more energy in swinging the club so as to overcome the weight restrictions and balancing attributes of a golf club shaft. Since the battery housing, of the Cornell reference, is disposed within the shaft of a golf club, it would appear that the golf club shaft must be physically

configured and designed to receive said housing, thus, requiring physical alterations and possible reengineering of golf club shafts for holding batteries.

Applicant contends that by placing all electrical components and connections within said end cap assembly, there poses very little weight restrictions and misbalancing features of a shaft and requires no alterations or redesigns of standard shafts.

The Examiner also contends that Cornell discloses an electrical switch (62) [Fig. 7 & 9, page 4, [0054] teaches power supply 60 and electric controls 62 are electrically connected to said power supply, page 4, [0055] being electrically coupled to said power source, said electrical connecting means and said heating member for controlling a supply of current to said heating member. Examiner suggests that page 1, paragraph 8, of the Cornell reference, teaches a control system mounted in the base or elsewhere. Examiner appears to suggest that the Cornell reference teaches a control system can be mounted elsewhere such as on a hand grip itself.

It should be noted that page 1, paragraph 8, of the Cornell reference states, "And a control system is mounted in the base or elsewhere in the golf bag for turning the power supply on and off, controlling the temperature and/or heating cycle, etc..". Cornell teaches that an electric power supply, electric controls, light emitting diodes, etc. are specifically mounted within a golf bag and that the golf club shaft must be mounted within said golf bag in order to control the heating system. The Cornell reference is silent as to placing controls directly on the hand grip or shaft of a golf club. In fact, reviewing the several embodiments of the Cornell reference suggests the invention was designed and intended for placing the power source within the shaft of the golf club where the golf club shaft or grip includes no controls because the heating system would always be in the ON position when the golf club was removed from the bag. Therefore, in Cornell, the golf club must be placed within a bag in order to control the heating system, that once the club is removed from the bag, the heating system is always energized by the power source disposed within the shaft of the club. Thus, an individual cannot control the heating

system at the hand grip itself, thereby requiring dependency on a bag which includes the controls.

It is respectfully submitted that Cornell does not teach nor suggest electrical controls, including an electrical switch, disposed on the heated hand grip itself, and more specifically, within an end cap assembly. Cornell clearly recites that the controls are mounted within a golf bag. Placing the electric controls on the heated hand grip itself allows the user to have complete control of being able to turn on or off the heating member without reliance on a golf bag. In one non-limiting example, on many occasions a golfer strays away from the golf bag to walk a great distance with the golf club in his hands. With the electric controls on the hand grip itself, the golfer can control the heating member as he or she wishes without having to return to and depend on the controls within a golf bag in order to control the heating member. In another non-limiting example, the game of mini-put, which includes simply a golf putter, generally does not provide for the use of a golf bag. Again, applicant notes that in his application, the electrical controls are completely integrated within the heated hand grip thereby allowing a mini-put player to have complete control of the heating member throughout the game without reliance on a golf bag.

Examiner contends that the end cap of the Cornell reference teaches an end cap which includes a receptacle and a plurality of threads internally formed within said sidewall member. The applicant respectfully disagrees. The Cornell reference teaches an end cap 696 coupled to a battery housing so that the batteries can be replaced or accessed. The Cornell reference does not teach an end cap assembly including a receptacle for having a power source and electric components disposed therein. As seen in Figure 19 of the Cornell reference, the end cap 696 merely holds the battery within the housing in the golf club shaft. In addition, Cornell does not teach or show a plurality of threads internally formed within a sidewall member of the end cap assembly. As seen in Figure 19 of the Cornell reference, the end cap 696 includes a plurality of threads externally formed on the outer perimeter of the end cap. As

noted earlier above, forming the threads internally of the end cap assembly means that the threads are hidden from exposure, thus, reducing wear and tear and the chances of destroying or altering the threads thereby making it more difficult to threadably attach the end cap assembly.

Examiner correctly notes that the Cornell reference teaches a light emitting diode being electrically coupled to the electrical switch and the power source for indicating when the heating member is activated. However, as noted in the Cornell reference, the light emitted diode is included in the golf bag and not on the heated hand grip itself. The applicant has specifically recited that the light emitting diode is included in an end cap assembly. The advantages of having the light emitting diode in the hand grip itself are explained above in reference to the electrical switch. One does not have to rely on a golf bag to see if the power source in the heated hand grip is low in voltage.

Examiner notes that the Cornell reference teaches that a shaft may comprise of any one of a golf club, tennis racket, badminton racket, hockey stick, curling broom, ski pole, paddle, fishing rod, broom, shovel, rake, hoe, screw driver, hammer, gardening tool, umbrella, cane or walking stick. Examiner appears to apply broad general statements, as recited in paragraphs 64, and 70-73, of the Cornell reference, to the specifically claimed and recited shafts of applicant's application. Applicant fails to see how the heated hand grip of the Cornell reference, which is controlled by electric controls mounted within a golf bag, is applicable to a variety of shafts that have no relation to a corresponding bag. For example, the heated hand grip of applicant's proposed invention may be placed on the end of an umbrella without having to place the umbrella within a bag in order to control a heating member.

Applicant contends that applicant's proposed invention provides an integrated, compact, self-controlled, heated hand grip which may be disposed on any one of said shafts as indicated above without reliance on a separate bag or apparatus for controlling the heating system of said hand grip.

Regarding claims 15-26, the Cornell reference does not teach the specific structures of an inner sleeve, an outer sleeve and the mechanical interconnection of said inner sleeve and said outer sleeve as recited in the claims. More specifically, claim 15 recites an inner sleeve including a plurality of hollow ribs, claim 17, recites and outer sleeve including a plurality of spaced channels, claim 21 recites an inner sleeve including a plurality of hollow stubs, and claim 23 recites an outer sleeve including a plurality of channels longitudinally formed within an interior surface. The Examiner has not appeared to address or cite any prior art in regards to claims 15-20, and 21-26.

For the reasons indicated above, and in light of amended claims 1, 2, 3, and 10 above, it is respectfully submitted that claims 1-26, are in condition for allowance.

Claim 27 has been amended to simply remove recitation of an electrical switch disposed about an outer sleeve. For the same reasons set forth above in relation to claims 1-13, it is submitted that claims 27-29 are in condition for allowance.

Applicant has amended claim 30, to include an end cap assembly removably coupled to said shaft for securing a portion of said heating strip, said end cap assembly including a top member and a sidewall member coupled to said top member so as to form a receptacle, said receptacle having a power source and electrical connecting means disposed therein and an electrical switch being electrically coupled to said power source, said electrical connecting means and said heating member for controlling a supply of current to said heating member, said electrical switch being disposed about said end cap assembly.

For the same arguments made above regarding claims 1-13, and 15-29, applicant contends that claim 30 has been amended to patentably distinguishes over both the Peissig patent and the Cornell reference.

As claims 31, and 34-39 depend on amended claim 30, applicant respectfully solicits the allowance of claims 31 and 34-39.

Applicant has cancelled claims 14, 32, 33 and 40-46.

For the reasons explained above, the invention claims 1-13, 15-31, and 34-39, are not anticipated by the cited references Peissig (US5517786) or Cornell (2003/0218007). The proposed invention provides an integrated, compact, self-controlled, electrically heated hand grip which may be inserted on a variety of shafts, as indicated above, without reliance on separate bag or apparatus for controlling the heating system of said hand grip and without physical or redesign modifications of said shaft for housing a power source.

Based on the foregoing discussion, applicant respectfully requests that the Examiner withdraw the rejection to claims 1-10 as being anticipated by the Peissig patent under 35 U.S.C. 102(b) and that the Examiner withdraw the rejection to claims 1-13, 21-22, 27-31 and 34-39, as being anticipated by the Cornell reference under 35 U.S.C. 102(b).

In view of the foregoing, Applicant respectfully submits that the present application is in condition for immediate allowance.

Respectfully submitted,


Vaughn Marquis

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